

REEL AND VIDEO COMBINATION MACHINE

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation in part claiming priority from U.S. patent application Ser. No. 11/514,808 filed Sep. 1, 2006 by Wells et al., which application is a continuation in part of a) commonly owned and co-pending U.S. patent application Ser. No. 10/213,626 entitled "Gaming Device Having a Three Dimensional Display Device," filed Aug. 6, 2002, and b) commonly owned and co-pending U.S. patent application Ser. No. 10/755,598 entitled "Multiple-State Display For a Gaming Apparatus," filed Jan. 12, 2004. Each of the above patent applications is incorporated herein by reference for all purposes.

BACKGROUND

[0002] This invention relates to gaming machines. In particular, the invention relates to gaming machines with layered displays disposed along a common line of sight.

[0003] Over the past few years, the experience of players using gaming machines has changed dramatically. For example, the hand pulled lever used to initiate game play is being replaced with a push button located beneath a main display on gaming machines. In addition, cashless gaming machines are becoming prevalent. When a player wins a game played on a cashless machine, he or she can cash out by pushing a button and the machine will print out a cashless ticket or other voucher. Still further, video display screens are now used to present all manner of games on gaming machines including video poker games, keno, etc. However, slot machines still often use mechanical stepper reels.

[0004] Video display screens represented an important advance by reducing moving parts in gaming machines, greatly increasing the range of different game types that could be played on gaming machines. By now, however, video display screens have begun to lose their novelty and ability to elicit a "gee whiz" player response. Part of this has to do with just how ubiquitous video display screens have become in all areas of personal and commercial life; they are found at airport kiosks, home computers, appliance readouts, etc.

[0005] Further, some players still prefer the look and "feel" of conventional rotating stepper reels in slot machines. Currently deployed gaming machine video displays provide a poor rendition of the three-dimensional look and feel of a "real" mechanical slot machine. As a consequence, casinos and other gaming establishments that rely on video slot machines may lose valuable opportunities to entice all players and potential players.

[0006] It should also be noted that current video gaming machines commonly employ multiple display devices to output video data. For example, some conventional gaming machines include an LCD panel disposed in a central part of the gaming machine for presenting a game, while a secondary and smaller LCD panel in a top box of the gaming machine provides bonus game or other information.

[0007] Upper and lower, side-by-side, or other separate display screen arrangements require a player to move his or her focus back and forth from one from one screen to another. This may lead to player distraction, which at a minimum reduces opportunities for generating excitement among

casino patrons. In a worse case, a player may become frustrated or tired with the gaming machine and simply refuse to use it again.

[0008] In view of the above, it would be desirable to have improved modes of presenting information about wins on gaming machines.

SUMMARY

[0009] The invention described herein provides methods, systems, and apparatus for displaying games or other information in multiple formats on apparatus such as gaming machines. The information is provided on at least two different display devices such as reels and video displays. The different display devices may be moved into and out of position with respect to one another, and to a player's line of sight, during game play. In some embodiments, the video displays are substantially flat, while the reels are mechanical spinning reels, although they may be video reels formed on a curved display such as a curved video display configured to depict spinning reels.

[0010] One aspect of the invention provides apparatus such as a gaming machine that may include the following features: (a) an external cabinet defining an interior region of the gaming machine; (b) a processor configured to execute instructions from memory that permit game play on the gaming machine; (c) one or more reels or a reel display mounted to or within the external cabinet; (d) a video display device positioned in front of and along a common line of sight with respect to the reels or reel display such that a player, while positioned for playing a game on the gaming machine, can view either of both of the video display device and the reels or reel display along the common line of sight; and (e) a mechanism for moving at least one of the video display device and the reels or reel display into and out of position along the common line of sight. It should be understood that the external cabinet is typically adapted to house a plurality of gaming machine components within or about the interior region.

[0011] In some embodiments, the gaming machine also includes game presentation logic for execution on the processor to present video information on the video display device pertinent to said game play on the gaming machine. The game presentation logic may also determine whether the video display device or the reels should be active at any given time for presenting game information. Typically, the game presentation logic includes instructions for controlling display of symbols on the reels or reel display.

[0012] Because the machine includes reels or a reel display, the game play frequently involves playing a slot game. However, the invention is not limited in this manner. Other types of game play include playing a video card game, baccarat, video pachinko, a lottery, keno, and/or a bingo game.

[0013] The one or more reels or the reel display may be mechanically rotatable reels. Alternatively, the reels or the reel display may be a curved surface of a digital or video display device. In certain embodiments, the reels or the reel display include an organic light emitting diode (OLED) device for displaying the symbols. For example, the reels or the reel display may comprise an OLED device on a mechanical reel. In certain embodiments, the reels or the reel display include an electroluminescent display for displaying the symbols. In some gaming machines of this invention, the apparatus includes a projection-type display device configured to cast an image of reel symbols onto the reels or the reel display.